Historic, archived document

Do not assume content reflects current scientific knowledge, policies, or practices.

UNITED STATES DEPARTMENT OF AGRICULTURE
Radio Service
OFFICE OF INFORMATION

HOUSEKEEPERS' CHAT   Thursday, February 3, 1938

(FOR BROADCAST USE ONLY)

Subject: "GOOD NEWS ABOUT SIRUPS." Information from the Bureau of Chemistry and Soils, U. S. Department of Agriculture. Publication available, Farmers' Bulletin 1791-F, "Farm Production of Sorgo Sirup."

--ooOoo--

Every homemaker who expects to have a supply of table sirup down cellar or out in the pantry this season will be interested, I am sure, in the news I have for you today. It's about some research in sirup-making, from both sugarcane and sorghum, that has been successfully completed by the Bureau of Chemistry and Soils of the U. S. Department of Agriculture.

One feature of the new process that has been developed is that the sirup so made doesn't "sugar" as it stands in storage. You don't have to go to the trouble of melting it on the back of the stove before it can be poured on the pancakes or mixed with the gingerbread batter.

It has other advantages, too. The sorgo sirup made by the new method is lighter in color and milder in flavor than sorgo sirup made the old way. It has a more pleasing aroma, less dregs, and keeps better. Its quality is more uniform -- a distinct advantage both for home use and when part of the supply is made to sell. Sugarcane sirup made by the new method has similar advantages.

The men of the family usually have the job of sirup-making, so their interest is most likely greater in the process of making it than in the use of the sirup. Although I must say that as ultimate consumers of sirup with waffles, pancakes, or of ginger-bread, spice cakes, cookies and all the other good things made with sirup they certainly do their share.

This country produces about 15 million gallons of sorgo sirup annually. Maybe you've always called it "sorghum molasses," but correctly speaking it's sorgo sirup. Alabama, Mississippi, Texas, and North Carolina lead in the production of sorgo sirup. About a third more -- 20 million gallons -- of sugarcane sirup is produced annually, chiefly in Georgia, Mississippi, Alabama, Louisiana and Florida, but the sorgo sirup is made over a much wider area than sugarcane sirup. Both are important cash crops as well as family subsistence crops on thousands of farms.

Whichever sirup is produced where you live, under the new process much the same methods are used for making either one. The old way of making sirup was with a community outfit consisting of a horse-drawn cane mill, an evaporating pan and a few other pieces of equipment, moved from farm to farm. The sirup was usually made on a toll basis. Some of it was splendid, in spite of the handicaps under which the sirup makers worked. But there was ever present danger of scorching, burning, jellying, clabbering and "sugaring."

We know now that much of the trouble encountered in making sorgo sirup by the old method was caused by the starch in the juice, but there was nothing much the farmer could do about it. The heart of this new method centers around 4 points: Careful straining of juice and sirup, allowing the juice to settle before it is evaporated, semi-cooking and treating, and taking off at the proper time. It sounds technical, but is really very easy because everything can be done easily and efficiently. Guessing is eliminated, and those who tried the new method last season like it from start to finish.

It is important that both the juice and the sirup be well strained in the course of making. The juice is first strained through a coarse burlap as it comes from the mill, and through finer strainers as it enters the juice settling tank, the treating tank, and finally the canning tank. If the freshly ground sorgo juice stands for 2 hours before it is turned into the evaporating pan, the dregs and much of the trouble-making starch will settle. After they have settled, they are left behind in the next part of the process by the simple device of sloping the tanks toward the outlets and placing the outlet pipes from 1 to 2 inches above the bottom of the settling tanks.

Two cookings are necessary under the new method. So is an instrument called a Baumē hydrometer that eliminates all guessing about whether the "half-done" stage has been reached. You don't need a degree in chemistry to use a Baumē hydrometer. It's as simple as testing the radiator of your car for anti-freeze content. The hydrometer soon pays for itself many times over in a better quality and more uniform sirup.

The first cooking, known as semi-cooking or half-evaporating is done in a new type pan that has wings or troughs on the sides that simplify skimming. In this first cooking the juice is allowed to reach a half-done stage only, when the hydrometer shows a reading of 20 degrees. Then it is promptly removed.

When the sirup is half-done it flows from the large evaporator to a treating tank, where it is thoroughly mixed with malt. This converts the troublesome starch into sugar and prevents scorching, and clabbering, or jellying. Invertase is also used in making sirup from certain varieties. Invertase and no malt is used for sugarcane sirup.

The second cooking takes place the next day, until the hydrometer shows a reading of 35-1/2 or 36 degrees. However, if you intend to try this new process, you will find all these details and much other information in a new Farmers' Bulletin, Number 1791-F, "Farm Production of Sorgo Sirup," which can be obtained free by writing to the U. S. Department of Agriculture.

Alabama was the first State to appoint an Extension Sirup Specialist to bring the new method to a large number of farmers. The Bureau of Chemistry and Soils believes that in a relatively short time there will be many community mills for grinding sugarcane or sorghum and making the sirup, probably on a toll basis.

If you are interested in making better and more uniform quality sorghum, remember to write for Farmers' Bulletin 1791-F, entitled "Farm Production of Sorgo Sirup."

****